



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,690	10/22/2003	Dararith Un	2486/SPRI 107676	4897

32423 7590 11/01/2007
SPRINT COMMUNICATIONS COMPANY L.P.
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

EXAMINER

SAMUEL, DEWANDA A

ART UNIT	PAPER NUMBER
----------	--------------

2616

MAIL DATE	DELIVERY MODE
-----------	---------------

11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/689,690

Applicant(s)

UN ET AL.

Examiner

DeWanda Samuel

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The response filed on 08/21/2007 has been received and made of record.
2. Applicant's arguments with respect to claims 1-55 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. **Claims 1,17,33,41and 49** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The recited limitation "wherein the at least one virtual point-to-point connection emulates a dedicated connection path". Appropriate corrections are required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1-3, 5,11-13, 15-19,21,27-29,31-33,37-39,41,45-47,49-53,14,30,40,48,55** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin (PG PUB 2003/0149746) in view of Araujo et al. (US Patent 6,118,785).

With regard to claim 1, Baldwin discloses having a *system for generating an enhanced data*, Baldwin discloses having a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title).

comprising: an input interface that receives data associated with a modem-based data session established via at least one circuit-switched network communicating with at least one asymmetric-routing asymmetrically routed data network that is capable

of facilitating a transfer of encapsulated data packets that are associated with the modem-based data session and operable to send using a tunneling protocol for delivery via one or more virtual connections; at least one enhancement cluster for processing the encapsulated data packets that enhances a connection from a source to a destination network; Baldwin et al. discloses that the subscribers dial into the access

node over the public telephone network using a modem and standard dial-up networking software on their computer ("modem based data session"). Prior to placing the call the subscriber enters a valid userid/password into dial-up networking window. When a subscriber dials the ensobox telephone number, the call is routed to one of the modem ports on the Remote Access Server ("input interface", page 5 paragraph 153 line 1-8). Baldwin further discloses that the ensobox ("enhancement cluster") provides dial-up access to the Internet (page 3 paragraph 113 line 1-2)... and that the core node within the ensobox ("enhancement cluster") is the "middle man" between the Internet and the Public Switched Telephone Network (PSTN, paragraph 137 line 1-7). It is inferred that the communication between a subscriber that is using the telephone access (e.g. PSTN) for dial-up to interfacing with the Internet which is an asymmetric network. Baldwin further discloses PPP (point to point) sessions transmitting over serial lines ("facilitating a transfer of encapsulated data packets, page 8 paragraph 23). It is known in the art PPP frames are encapsulated in a lower layer protocol. In addition, Baldwin discloses the ensobox processing data within PPP session from a PSTN ("source network") to the Internet ("destination network"). However, Baldwin does not explicitly disclose operable to send using a tunneling protocol for delivery via one or

Art Unit: 2616

more virtual connections. Araujo et al. discloses having a point-to-point protocol with a signaling channel (title)...also having a enhanced PPP (point to point protocol) whereby transmitting data within a VC virtual circuit to ISP Remote Access Server (RAS(column 9 line 12-20)...encapsulation for PP data packets sent between two L2TP (layer 2 tunnel protocol) endpoints (column 9 line 28-30 and fig. 1).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a ensobox (enhancement cluster) as taught by Balwin transporting data L2TP (layer 2 tunnel protocol) endpoints as taught by Araujo et al. providing a more managed flow of data through the network.

and at least one virtual point-to-point connection for communicating the encapsulated data packets over a communications path traversing the at least one asymmetric-routing data network, wherein the at least one communications path couples the input interface to the at least one enhancement cluster, and wherein the at least one virtual point-to-point connection emulates a dedicated connection path connecting the input interface to the at least one enhancement cluster;

Baldwin discloses having a PPP session ("point-to-point connection") within a network that comprise of a PSTN and the Internet ("asymmetric-routing data network" fig. 2-4 and page 8 paragraph 223). It is known in the art the packets are encapsulated in a PPP connection. Baldwin further discloses having a plurality of communication paths coupled to remote access servers ("input interface") to the ensobox (fig. 2-4). However, Baldwin does not explicitly

discloses wherein the at least one virtual point-to-point connection emulates a dedicated connection path connecting the input interface to the at least one enhancement cluster. Araujo et al. discloses having a PPP communication session transmitting data over a VC (virtual connection) to the RAS ("remote access server")... each PPP data belonging to a particular session from a particular CPE is mapped one-to-one to a particular L2TP Tunnel(column 9 line 9-46). It is inferred the PPP session is a dedicated session is mapped one-to-one to a particular L2TP Tunnel.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a PPP session ("point-to-point connection") as taught by Baldwin providing a particular session from a particular CPE that is mapped one-to-one to a particular L2TP Tunnel as taught by Araujo et al. providing a more secure and managed data flow through the network.

With regard to claim 2, in combination Baldwin and Araujo et al. teaches the system recited in claim 1. *wherein the input interface comprises a set of remote access servers*. Baldwin et al. discloses having a ensoBox which includes Remote access servers (page 9 paragraph 280 and page 10 line 1).

With regard to claim 3, in combination Baldwin and Araujo et al. teaches the system recited in claim 1. *wherein the encapsulated data packets are sent using a tunneling protocol comprising a Layer 2 tunneling protocol wherein the at least one*

tunnel comprises a Layer 2 Tunneling Protocol tunnel. However, Baldwin does not disclose having encapsulated data packets are sent using a tunneling protocol comprising a Layer 2 tunneling protocol wherein the at least one tunnel comprises a Layer 2 Tunneling Protocol tunnel. Araujo et al. discloses having L2TP (Layer 2 tunneling protocol, column 9 line 27).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services. (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Araujo et al. to provide a more secure technique to access the communication network.

With regard to claim 5, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of load balancers.* Baldwin et al discloses having ensoBox ("enhancement cluster") with a load balancer.

Baldwin discloses the claimed invention except for additional load balancer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a additional load balancer to efficiently balance the load of the servers, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144. 04 section VI B

With regard to claim 11, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *wherein processing the data packets wherein the enhancement of the data session comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session.* Baldwin discloses that the Access node within the ensoBox ("enhancement cluster") contains a cache engine ("performing caching", page 5 paragraph 144 and 145 line 1-3). It is inferred that packet are cached.

With regard to claim 12, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *Wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 13, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *Wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 15, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *Wherein access to the enhancement cluster is discriminated by at least a domain name.* Baldwin et al. disclose that the ensoBox supports primary domain name service (DNS) for access to locally stored ensoServices

Art Unit: 2616

and secondary domain name service (DNS) for web browsing (page 8 paragraph 234 line 1-6).

With regard to claim 16, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *A system according to claim 1, further comprising interface to an authentication platform, the authentication platform authenticating the data session for to the access enhancement cluster* (page 8 paragraph 228 and 229 line 1-11). Baldwin discloses that the ensoBox uses a RADIUS server (Remote Authentication Dial-In User Service) to perform AAA functions (authentication, authorization, accounting).

With regard to claim 17, Baldwin discloses having *One or more computer-storage media having computer-executable instructions embodied thereon for performing a method of enhancing a data connection from a source to a destination network, the method comprising: receiving data associated with a modem-based data session established via at least one circuit-switched network communicating with at least one data network that facilitates asymmetric data routing; encapsulating packets of the data to be sent in a tunneling protocol for delivery via one or more virtual connections*; Baldwin et al. discloses that the subscribers dial into the access node over the public telephone network using a modem and standard dial-up networking software on their computer('modem based data session"). Prior to placing the call the subscriber enters a valid userid/password into dial-up networking window. When a subscriber dials the ensobox telephone number, the call is routed to one of the

Art Unit: 2616

modem ports on the Remote Access Server ("input interface", page 5 paragraph 153 line 1-8). Baldwin further discloses that the ensobox ("enhancement cluster") provides dial-up access to the Internet (page 3 paragraph 113 line 1-2)... and that the core node within the ensobox ("enhancement cluster") is the "middle man" between the Internet and the Public Switched Telephone Network (PSTN, paragraph 137 line 1-7). It is inferred that the communication between a subscriber that is using the telephone access (e.g. PSTN) for dial-up to interfacing with the Internet which is an asymmetric network.

communicating the encapsulated data packets via at least one virtual point-to-point connection over a communications path traversing the at least one data network, wherein the at least one communications path couples at least one remote access server to at least one enhancement cluster, and wherein the virtual point-to-point connection emulates a dedicated connection path connecting the at least one remote access server to the at least one enhancement cluster; and processing the data packets in the at least one enhancement cluster to enhance the data connection Baldwin discloses having a PPP session ("point-to-point connection")

within a network that comprise of a PSTN and the Internet ("asymmetric-routing data network" fig. 2-4 and page 8 paragraph 223). It is known in the art the packets are encapsulated in a PPP connection. Baldwin further discloses having a plurality of communication paths coupled to remote access servers ("input interface") to the ensobox (fig. 2-4). However, Baldwin does not explicitly discloses wherein the at least

Art Unit: 2616

one virtual point-to-point connection emulates a dedicated connection path connecting the input interface to the at least one enhancement cluster. Araujo et al. discloses having a PPP communication session transmitting data over a VC (virtual connection) to the RAS ("remote access server")...each PPP data belonging to a particular session from a particular CPE is mapped one-to-one to a particular L2TP Tunnel(column 9 line 9-46). It is inferred the PPP session is a dedicated session is mapped one-to-one to a particular L2TP Tunnel.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a PPP session ("point-to-point connection") as taught by Baldwin providing a particular session from a particular CPE that is mapped one-to-one to a particular L2TP Tunnel as taught by Araujo et al. providing a more secure and managed data flow through the network.

With regard to claim 18, in combination Baldwin and Araujo et al. teaches the media recited in claim 17, wherein the step of receiving comprises receiving the data associated with a modem- based data session in the at least one remote access server. Baldwin discloses receiving modem based data to a remote access server (fig. 2-4).

With regard to claim 19, in combination Baldwin and Araujo et al. teaches the media recited in claim 17. *wherein the tunneling protocol comprises at lest one of a Laver 2 tunneling protocol and a Layer 3 tunneling protocol.* However, Baldwin does not

Art Unit: 2616

disclose having encapsulated data packets are sent using a tunneling protocol comprising a Layer 2 tunneling protocol wherein the at least one tunnel comprises a Layer 2 Tunneling Protocol tunnel. Araujo et al. discloses having L2TP (Layer 2 tunneling protocol, column 9 line 27).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Araujo et al. to provide a more secure technique to access the communication network.

With regard to claim 21, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. *Wherein the at least one enhancement cluster comprises a set of load balancers*. Baldwin et al discloses having ensoBox ("enhancement cluster") with a load balancer.

Baldwin discloses the claimed invention except for additional load balancer. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a additional load balancer to efficiently balance the load of the servers, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144.04 section VI B.

With regard to claim 27, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. *Wherein the processing comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session.* Baldwin discloses that the Access node within the ensoBox contains a cache engine (page 5 paragraph 144 and 145 line 1-3).

With regard to claim 28, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. *wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 29, in combination Baldwin and Ararujo et al. teaches the media recited in claim 17. *Wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 31, in combination Baldwin and Araujo et al. teaches the media recited in claim 17. *Further comprising discriminating the access to the enhancement cluster by at least a domain name.* Baldwin et al. disclose that the ensoBox supports primary domain name service (DNS) for access to locally stored ensoServices and secondary domain name service (DNS) for web browsing (page 8 paragraph 234 line 1-6).

With regard to claim 32, in combination Baldwin and Ararujo et al. teaches the media recited in claim 17. *Further comprising authenticating the data session for access to the enhancement cluster* (page 8 paragraph 228 and 229 line 1-11). Baldwin disclose that the ensoBox uses a RADIUS server (Remote Authentication Dial-In User Service) to perform AAA functions (authentication, authorization, accounting).

With regard to claim 33, Baldwin discloses having a system for generating an enhanced data connection, Baldwin discloses having a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title).

comprising: input interface means for receiving data associated with a modem-based data session established via at least one circuit-switched network communicating with at least one data network that facilitates asymmetric data routing; encapsulation means for encapsulating data packets, of the data associated with a modem-based data session, operable for sending using a tunneling protocol means for delivery via one or more virtual connections; at least one enhancement-cluster means for processing the data packets to enhance a connection from a source to a destination network; Baldwin et al. discloses that the subscribers dial into the access node over the public telephone network using a modem and standard dial-up networking software on their computer('modem based data session"). Prior to placing the call the subscriber enters a valid userid/password into dial-up networking window. When a subscriber dials the

Art Unit: 2616

ensobox telephone number, the call is routed to one of the modem ports on the Remote Access Server ("input interface", page 5 paragraph 153 line 1-8). Baldwin further discloses that the ensobox ("enhancement cluster") provides dial-up access to the Internet (page 3 paragraph 113 line 1-2)... and that the core node within the ensobox ("enhancement cluster") is the "middle man" between the Internet and the Public Switched Telephone Network (PSTN, paragraph 137 line 1-7). It is inferred that the communication between a subscriber that is using the telephone access (e.g. PSTN) for dial-up to interfacing with the Internet which is an asymmetric network. Baldwin further discloses PPP (point to point) sessions transmitting over serial lines ("facilitating a transfer of encapsulated data packets, page 8 paragraph 23). It is known in the art PPP frames are encapsulated in a lower layer protocol. In addition, Baldwin discloses the ensobox processing data within PPP session from a PSTN ("source network") to the Internet ("destination network"). However, Baldwin does not explicitly disclose operable to send using a tunneling protocol for delivery via one or more virtual connections. Araujo et al. discloses having a point-to-point protocol with a signaling channel (title)... also having an enhanced PPP (point to point protocol) whereby transmitting data within a VC virtual circuit to ISP Remote Access Server (RAS (column 9 line 12-20)... encapsulation for PP data packets sent between two L2TP (layer 2 tunnel protocol) endpoints (column 9 line 28-30 and fig. 1).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have an ensobox (enhancement cluster) as taught by

Art Unit: 2616

Balwin transporting data L2TP (layer 2 tunnel protocol) endpoints as taught by Araujo et al. providing a more managed flow of data through the network.

and at least one virtual point-to-point connecting means for communicating the encapsulated data packets over a communications path traversing the at least one data network, wherein the at least one communications path couples the input interface to the at least one enhancement cluster, and wherein the at least one virtual point-to-point connecting means includes a means for emulating a dedicated connection path connecting the input interface to the at least one enhancement cluster; Baldwin

discloses having a PPP session ("point-to-point connection") within a network that comprise of a PSTN and the Internet ("asymmetric-routing data network" fig. 2-4 and page 8 paragraph 223). It is known in the art the packets are encapsulated in a PPP connection. Baldwin further discloses having a plurality of communication paths coupled to remote access servers ("input interface") to the ensobox (fig. 2-4). However, Baldwin does not explicitly discloses wherein the at least one virtual point-to-point connection emulates a dedicated connection path connecting the input interface to the at least one enhancement cluster. Araujo et al. discloses having a PPP communication session transmitting data over a VC (virtual connection) to the RAS ("remote access server")...each PPP data belonging to a particular session from a particular CPE is mapped one-to-one to a particular L2TP Tunnel(column 9 line 9-46). It is inferred the PPP session is a dedicated session is mapped one-to-one to a particular L2TP Tunnel.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a PPP session ("point-to-point connection") as taught by Baldwin providing a particular session from a particular CPE that is mapped one-to-one to a particular L2TP Tunnel as taught by Araujo et al. providing a more secure and managed data flow through the network.

With regard to claim 37, in combination Baldwin and Araujo et al. teaches the system recited in claim 33. wherein the means for processing the data packets wherein the enhancement of the data session comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session. Baldwin discloses that the Access node within the ensoBox ("enhancement cluster") contains a cache engine ("performing caching", page 5 paragraph 144 and 145 line 1-3). It is inferred that packet are cached.

With regard to claim 38, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 33. *Wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 39, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 33. *Wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 41, Baldwin discloses having an enhanced data session, the enhanced data session being generated by a method comprising: receiving data associated with a modem-based data session established via at least a circuit-switched network communicating with at least one asymmetrically-routed data network; Baldwin discloses having a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services ("asymmetric-routed data network", Title).

encapsulating packets of the data to be sent in a tunneling protocol for delivery via one or more virtual connections; communicating the encapsulated data packets via at least one virtual point-to-point connection over a communications path traversing the at least one data network that facilitates asymmetric data routing, wherein the at least one communications path couples at least one remote access server to at least one enhancement cluster, and wherein the virtual point-to-point connection emulates a dedicated connection path connecting the at least one remote access server to the at least one enhancement cluster. Baldwin discloses having a PPP session ("point-to-point connection") within a network that comprise of a PSTN and the Internet ("asymmetric-routing data network" fig. 2-4 and page 8 paragraph 223). It is known in the art the packets are encapsulated in a PPP connection. Baldwin further discloses having a plurality of communication paths coupled to remote access servers ("input interface") to the ensobox (fig. 2-4). However, Baldwin does not explicitly discloses wherein the at least one virtual point-to-point connection emulates a dedicated

Art Unit: 2616

connection path connecting the input interface to the at least one enhancement cluster.

Araujo et al. discloses having a PPP communication session transmitting data over a VC (virtual connection) to the RAS ("remote access server")... each PPP data belonging to a particular session from a particular CPE is mapped one-to-one to a particular L2TP Tunnel(column 9 line 9-46). It is inferred the PPP session is a dedicated session is mapped one-to-one to a particular L2TP Tunnel..

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a PPP session ("point-to-point connection") as taught by Baldwin providing a particular session from a particular CPE that is mapped one-to-one to a particular L2TP Tunnel as taught by Araujo et al. providing a more secure and managed data flow through the network.

and processing the data packets to generate an enhanced session in the at least one enhancement cluster, the enhanced session connecting to a destination network.

Baldwin discloses PPP(point to point) sessions transmitting over serial lines ("facilitating a transfer of encapsulated data packets, page 8 paragraph 23). It is known in the art PPP frames are encapsulated in a lower layer protocol. In addition , Baldwin discloses the ensobox processing data within PPP session from a PSTN ("source network") to the Internet ("destination network").

With regard to claim 45, in combination Baldwin et al. and Araujo et al. teaches the enhanced data session recited in claim 41. *Wherein the processing comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session.* Baldwin discloses that the Access node within the ensoBox contains a cache engine (page 5 paragraph 144 and 145 line 1-3).

With regard to claim 46, in combination Baldwin et al. and Araujo et al. teaches the enhanced data session recited in, claim 41. *Wherein the destination network comprises the Internet.* Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 47, in combination Baldwin et al. and Araujo et al. teaches the enhanced data session recited in claim 41. *Wherein the data session originates as a point-to-point session.* Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 49, Baldwin discloses having *one or more computer-storage media having computer-executable instructions embodied thereon for performing a method of enhancing a data connection from a source to a destination network, the method comprising receiving data packets that form a part of a modem-*

based data session; Baldwin discloses data connection from a PSTN ("source network") to the Internet network ("destination network", fig. 2-4).

encapsulating the data packets to be sent in a tunneling protocol for delivery via one or more virtual connections: communicating the encapsulated data packets via at least one virtual point-to-point connection over a communications path traversing an asymmetric data network, wherein the at least one communications path couples at least one remote access server to at least one enhancement cluster, and wherein the virtual point-to-point connection emulates a dedicated connection path connecting the at least one remote access server to the at least one enhancement cluster; and processing the data packets in the at least one enhancement cluster to enhance the data connection; Baldwin discloses having a PPP session ("point-to-point connection")

within a network that comprise of a PSTN and the Internet ("asymmetric-routing data network" fig. 2-4 and page 8 paragraph 223). It is known in the art the packets are encapsulated in a PPP connection. Baldwin further discloses having a plurality of communication paths coupled to remote access servers ("input interface") to the ensobox (fig. 2-4). However, Baldwin does not explicitly discloses wherein the at least one virtual point-to-point connection emulates a dedicated connection path connecting the input interface to the at least one enhancement cluster. Araujo et al. discloses having a PPP communication session transmitting data over a VC (virtual connection) to the RAS ("remote access server")...each PPP data belonging to a particular session from a particular CPE is mapped one-to-one to a particular L2TP Tunnel(column 9 line

9-46). It is inferred the PPP session is a dedicated session is mapped one-to-one to a particular L2TP Tunnel.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a PPP session ("point-to-point connection") as taught by Baldwin providing a particular session from a particular CPE that is mapped one-to-one to a particular L2TP Tunnel as taught by Araujo et al. providing a more secure and managed data flow through the network.

With regard to claim 50, in combination Baldwin and Araujo et al. teaches the media recited in claim 49. wherein the processing comprises at least one of applying compression, applying decompression, performing caching, applying optimization, and applying security to the data session. Baldwin discloses that the Access node within the ensoBox contains a cache engine (page 5 paragraph 144 and 145 line 1-3).

With regard to claim 51, in combination Baldwin and Araujo et al. teaches the media recited in claim 49. wherein the destination network comprises the Internet. Baldwin discloses in fig.3 that the destination network is the Internet.

With regard to claim 52, in combination Baldwin and Araujo et al. teaches the media recited in claim 49. wherein the data session originates as a point-to-point

Art Unit: 2616

session. Baldwin disclose having point-to-point protocol (PPP) sessions (page 8 paragraph 223 line 1-5).

With regard to claim 53, in combination Baldwin and Araujo et al. teaches the media recited in claim 49. *wherein the tunneling protocol comprises at least one of a Layer 2 tunneling protocol and a Layer 3 tunneling protocol*. However, Baldwin does not disclose having encapsulated data packets are sent using a tunneling protocol comprising a Layer 2 tunneling protocol wherein the at least one tunnel comprises a Layer 2 Tunneling Protocol tunnel. Araujo et al. discloses having L2TP (Layer 2 tunneling protocol, column 9 line 27).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. utilizing a layer 2 tunnel protocol (L2TP) as taught by Araujo et al. to provide a more secure technique to access the communication network.

With regard to claim 14, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. wherein access to the enhancement cluster is granted based on one or more of a password, certificate, and cookie. Baldwin discloses having users dialing into the ensobox ("enhancement cluster") via access node using a userid/password (page 5 paragraph 153).

With regard to claim 30, in combination Baldwin and Ararujo et al. teaches the media recited in claim 17. *further comprising discriminating access to the enhancement cluster based on at least one of a password, certificate, and cookie*; Baldwin discloses having users dialing into the ensobox ("enhancement cluster") via access node using a userid/password (page 5 paragraph 153).

With regard to claim 40, in combination Baldwin and Araujo et al. teaches the system recited in claim 33. wherein access to the enhancement cluster means is granted based on one or more of a password, certificate, cookie; Baldwin discloses having users dialing into the ensobox ("enhancement cluster") via access node using a userid/password (page 5 paragraph 153).

With regard to claim 48, in combination Baldwin et al. and Araujo et al. teaches the enhanced data session recited in claim 41. *wherein access to the enhancement cluster is granted based on one or more of a password, certificate, cookie*; Baldwin discloses having users dialing into the ensobox ("enhancement cluster") via access node using a userid/password (page 5 paragraph 153).

With regard to claim 55, in combination Baldwin and Araujo et al. teaches the media recited in claim 49. *wherein at least two of the enhancement platforms of the set of distributed enhancement platforms are hosted at separate locations*; Baldwin

discloses having users dialing into the ensobox ("enhancement cluster") via access node using a userid/password (page 5 paragraph 153).

7. **Claims 4,7,20 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin (PG PUB 2003/0149746) and Araujo et al. (US Patent 6,118,785) as applied to claim 1 above, and further in view of Lin (US patent 7,117,530)

With regard to claim 4, in combination Baldwin and Araujo et al. teaches the system recited in claim 1. wherein the at least one virtual point-to-point connection comprises a plurality of virtual point-to-point connections wherein the at least one tunnel comprises a plurality of tunnels. Baldwin discloses having a point-to-point (PPP) connection (page 8 paragraph 223). However, Baldwin et al does not disclose having at least one tunnel comprises a plurality of tunnels. Lin discloses having a scalable and reliable VPN tunnel implantation. Lin further discloses as the tunnel client 204 attempts to establish a tunnel with a tunnel server it sends a tunnel establishment request to the tunnel designator 202 (column 2 line 45-53)...the system is 200 is in a hybrid structural/functional manner... the tunnels are IPSEC/Firewall protected as seen in fig.2 (column 2 line 54-62). It is inferred that the tunnel designator 202 establishes new tunnels as requested within the IPSEC/Firewall protected tunnel path.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title)

Art Unit: 2616

as taught by Baldwin et al. with a tunnel designator that establishes tunnels within a IPSEC/Firewall protected tunnel path as taught by Lin to transport data in more secure and reliable path.

With regard to claim 7, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of tunnel servers*. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having tunnel servers. Lin discloses having a VPN (virtual private network) tunnel implementation with a tunnel server farm 206 (fig. 2).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title)as taught by Baldwin et al. with a tunnel server farm 206 as taught by Lin to provide high speed secure services during transmission.

With regard to claim 20, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. *wherein the at least one virtual point-to-point connection comprises a plurality of virtual point-to-point connections*; However, Baldwin et al does not disclose having at least one tunnel comprises a plurality of tunnels. Lin discloses having a scalable and reliable VPN tunnel implantation. Lin further discloses as the

Art Unit: 2616

tunnel client 204 attempts to establish a tunnel with a tunnel server it sends a tunnel establishment request to the tunnel designator 202 (column 2 line 45-53)...the system is 200 is in a hybrid structural/functional manner... the tunnels are IPSEC/Firewall protected as seen in fig.2 (column 2 line 54-62). It is inferred that the tunnel designator 202 establishes new tunnels as requested within the IPSEC/Firewall protected tunnel path.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a tunnel designator that establishes tunnels within a IPSEC/Firewall protected tunnel path as taught by Lin to transport data in more secure and reliable path.

With regard to claim 23, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. Wherein the at least one enhancement cluster comprises a set of tunnel network servers. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having tunnel servers. Lin discloses having a VPN (virtual private network) tunnel implementation with a tunnel server farm 206 (fig. 2).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title)

Art Unit: 2616

as taught by Baldwin et al. with a tunnel server farm 206 as taught by Lin to provide high speed security services to secure data in transit.

8. **Claims 6,22,34 and 42** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin et al. (PG PUB 2003/0149746 A1) and Araujo et al. (PG PUB 2003/0163577 A1) as applied to claim 1 and 17 above, and further in view of Arrow (US Patent 6,226,751).

With regard to claim 6, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of compression servers.* Baldwin et al discloses having ensoBox ("enhancement cluster"). However, Baldwin doe not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Araujo et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of

Art Unit: 2616

the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144. 04 section VI B

With regard to claim 22, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. *Wherein the at least one enhancement cluster comprises a set of compression servers*. Baldwin et al discloses having ensoBox ("enhancement cluster"). However, Baldwin doe not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Araujo et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144. 04 section VI B.

With regard to claim 34, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 33. *Wherein the at least one enhancement cluster means comprises a set of compression server means*. Baldwin et al discloses having ensoBox

Art Unit: 2616

("enhancement cluster"). However, Baldwin does not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Araujo et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144.04 section VI B.

With regard to claim 42, in combination Baldwin et al. and Araujo et al. teaches the enhanced data session recited in claim 41. *Wherein the at least one enhancement cluster comprises a set of compression servers*. Baldwin et al discloses having ensoBox ("enhancement cluster"). However, Baldwin does not explicitly disclose having set of compression servers. Arrow et al. discloses having a VPN unit (virtual private network unit, "enhancement cluster") with a compression-decompression unit 732 (column 10 line 44-48).

In combination Baldwin et al., Araujo et al. and Arrow discloses the claimed invention except for an additional compression/decompression unit 732 ("compression

server") as taught by Arrow. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have additional compression/decompression unit 732 ("compression server") to handle the large volume of dial-up Internet access traffic, since it has been held that mere duplication of the essential working part of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. See MPEP 2144.04 section VI B.

9. Claims 8-10, 24-26, 35,36 ,43 and 44 are rejected under 35 U SC 103(a) as being unpatentable over Baldwin et al (PG PUB 200310149746 A1) and Araujo et al. (US Patent 6,118,785) as applied to claim 1, 17, 33, and 41 above, and further in view of Baldwin (PG PUB 2003/0078996 A1).

With regard to claim 8, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 1. *Wherein the at least one enhancement cluster comprises a set of distributed enhancement platforms.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not disclose having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered

Art Unit: 2616

services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 9, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 8. *Wherein at least two of the set of distributed enhancement platforms are operated by separate access providers.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable

Art Unit: 2616

manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 10, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 9. *Wherein the at least two of the set of distributed enhancement platforms are hosted at separate locations.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having at least two of the set of distributed enhancement platforms are hosted at separate locations. Baldwin discloses having Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). It is obvious that the Ensobox ("enhancement cluster") clustered services architecture is a autonomous therefore it can be hosted in a different locations.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider

Art Unit: 2616

appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 24, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. *Wherein the at least one enhancement cluster comprises a set of distributed enhancement platforms.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin

Art Unit: 2616

(2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 25, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 17. Wherein at/least two of the set of distributed enhancement platforms are operated by separate access providers. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (200310078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et alo with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 26, in combination Baldwin et al. and Araujo et al. teaches the media recited in claim 25. *Wherein the at/least two of the set of distributed enhancement platforms are hosted at separate/ocations.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (200310078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Cfustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 35, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 33. *Wherein the at least one enhancement cluster means*

comprises a set of distributed enhancement platform means. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers:

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 36, in combination Baldwin et al. and Araujo et al. teaches the system recited in claim 33. *Wherein at least two of the set of distributed enhancement platform means are operated by separate access providers.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services

Art Unit: 2616

(Title). However, Baldwin does not disclose having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 43, in combination Baldwin et al. and Araujo et al. teaches the enhanced data session recited in claim 41. *Wherein the at least one enhancement clusters comprises a set of distributed enhancement platforms*. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not disclose having a set of distributed enhancement platforms. Baldwin

Art Unit: 2616

(2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 44, in combination Baldwin et al. and Araujo et al. teaches the enhanced data session recited in claim 43. *Wherein at least two of the set of distributed enhancement platforms are operated by separate access providers.* Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of

Art Unit: 2616

scalable, robust, and industrial strength internet services providers appliance (Title).

Baldwin further discloses having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

With regard to claim 54, in combination Baldwin and Araujo et al. teaches the media recited in claim 49. *wherein the at least one enhancement cluster comprises a set of distributed enhancement platforms*. Baldwin discloses having a Ensobox ("enhancement cluster") an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title). However, Baldwin does not discloses having a set of distributed enhancement platforms. Baldwin (2003/0078996 A1) discloses having a Ensobox ("enhancement cluster") clustered services architecture: techniques for enabling the creation of scalable, robust, and industrial strength internet services providers appliance (Title). Baldwin further discloses

Art Unit: 2616

having a Clustered services architecture (CSA) utilizing a enterprise platform..., the Clustered services architecture (CSA) approach integrates the breed hardware and software to provide an architecture capable of delivering Internet services in a reliable manner (page 3 paragraph 47 line 1-5). It is inferred that the EnsoBox clustered services architecture provides individual platform for different service providers.

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a Ensobox an Internet Service Provider appliance that enables an operator thereof to offer a full range of Internet services (Title) as taught by Baldwin et al. with a clustered services architecture as taught by Baldwin (2003/0078996 A1) for scaling services provided by the service provider independently.

Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tonnby et al. (US Patent 6,295,293) discloses having an access network over a dedicated medium

Zhang et al. (US Patent 6,985,935) discloses having a method and system for providing network access to PPP clients.

Dato Solis et al. (US Patent 5,930,258) discloses having a structure for an electronic data system.

Mistry (US Patent 6,426,950) discloses having a method of resource management at computer controlled telephony hardware.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DeWanda Samuel whose telephone number is (571) 270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DeWanda Samuel
10/29/2007


RICKY Q. NGO
SUPERVISORY PATENT EXAMINER